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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/684,662	10/10/2000	John Boakes	367.39057X00	4096

20457 7590 09/23/2002

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EXAMINER

LE, HOANGANH T

ART UNIT PAPER NUMBER

2821

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/684,662

Applicant(s)

BOAKES et al

Examiner

HOANGANH LE

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 5, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 22-24, 27-50, and 53-58 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 22-24, 27-50, and 53-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "holes" of claims 53 and 54 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-9, 15-18 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayes et al (the US Patent No. 5,828,342).

The Hayes et al reference teaches in figure 1 an antenna comprising: a conductive element 18 defining a planar antenna 10 and a flexible member 12 arranged to carry the conductive element and to protrude from a surface of a handheld telecommunication apparatus. The conductive element is embedded in the flexible member 12. The flexible member is generally flat and planar (figure 2). The conductive element is disposed on a central bend axis of the flexible member (figure 1). The conductive element is disposed on a substrate (figure 1). The flexible member is biased towards a generally planar equilibrium. The assembly further comprises a relatively rigid base portion for connecting the assembly to the telecommunication apparatus (figure 1).

5. Claims 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Bunert (the US Patent No. 6,259,606).

The Bunert reference teaches in figure 1 a method of producing an antenna assembly comprising the steps of arranging a planar antenna element 2 to be disposed on a substrate 10 and encapsulating the planar antenna element within a flexible member by means of an injection moulding process (col. 1, lines 26-34 and col. 2, lines 10-13).

6. Claims 1-11, 12, 15-18, 22-24, 27-34, 43-50 and 53-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Winstead et al (the US Patent No. 6,232,924).

The Winstead et al reference teaches in figure 6 an antenna comprising: a conductive element 33 defining a planar antenna and a flexible member 93, 94 arranged to carry the conductive element and to protrude from a surface of a handheld telecommunication apparatus. The conductive element 33 is embedded in the flexible member (figure 6). The flexible member is generally flat and planar (figures 6-7). The conductive element is disposed on a central bend axis of the flexible member. The conductive element is disposed on a substrate (figure 6). The flexible member is biased towards a generally planar equilibrium (figure 6). The assembly further comprises a relatively rigid base portion 41 for connecting the assembly to the telecommunication apparatus. The conductive element is a pre-formed wire (figures 6-7). The conductive member is a stamped out pattern from a planar sheet. The conductive element is stainless

or spring steel. The substrate is polyester. The substrate is polyamide. The flexible member is a thermo plastic elastomer. The conductive element is within the flexible member (col.8, lines 20-63).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 13,14,35-38, and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winstead et al (cited above).

Regarding claims 13,14,35-38,39-42, while the antenna of Winstead et al fails to specifically disclose how to bond the conductive element to the substrate, inasmuch as the use of a process of etching and a process of printing using conductive ink are notoriously well known in the art and fail to patentable distinguish the antenna taught by Winstead et al, the modification would have represented an obvious design expedient.

Note Tuttle et al (the US Patent No. 5,907,477) teaches that the use of a process of etching and a process of printing using conductive ink are notoriously well known in the

art (col. 4, lines 34-39 and col. 7, lines 25-34).

Response to Arguments

9. Applicant's arguments with respect to claims 1-18, 22-24, 27-50, and 53-58 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Hoanganh Le whose telephone number is (703) 308-4921.

11. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

12. Papers related to Technology Center 2800 applications **only** may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

Hoanganh Le
Primary Examiner
Art Unit 2821



Hoanganh Le
Primary Examiner